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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,836	03/09/2004	Gregory W. Starr	ALT-303	5670
36981	7590	09/15/2005	EXAMINER	
FISH & NEAVE IP GROUP ROPES & GRAY LLP 1251 AVENUE OF THE AMERICAS FL C3 NEW YORK, NY 10020-1105			NGUYEN, LINH M	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/797,836	Applicant(s) STARR ET AL. (PW)	
	Examiner Linh M. Nguyen	Art Unit 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 11-21 and 24-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7, 14-21 and 24-27 is/are allowed.
- 6) ☒ Claim(s) 11-13 and 28-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>08/05/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a reply to Applicants' amendment filed 08/05/2005. By virtue of this amendment, claims 8-10 and 22-23 are canceled; thus claims 1-7, 11-21 and 24-30 are currently presented in the instant application.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

A person shall be entitled to a patent unless –

2. Claims 11-13 and 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Ebuchi et al. (U.S. Patent No. 6,392,462).

With respect to claims 11 and 29-30, Ebuchi et al. discloses, in Fig.10, a circuit and its corresponding method of converting an input clock signal [REFCLK] to a plurality of output clock signals [PH1, ..., PH10] the method comprising modifying the input clock signal having an input frequency to produce a first signal having a first frequency; phase-shifting [100] plurality of second signals each having a phase and the first frequency, each of the second signals [PHA1,..., PHA10] having a phase different than the phase of the others of the second signals; the first signal to produce a modifying each of the second signals substantially concurrently to produce an output signal having a phase and an output frequency, each of the output signals having an individually selectable output frequency; and selectably [700] coupling any one of the output signals to an integrated circuit chip output pin; selectably [700] coupling any one of the output signals to a global clock network, the global clock network providing clock

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signals to all clockable circuits on an integrated circuit chip; or selectably [700] coupling any one of the output signals to at least one local clock network, the local clock network providing clock signals to only a portion of clockable circuits on the integrated circuit chip.

The recitation of “*selectably coupling any one of the output signals to an integrated circuit chip output pin; selectably coupling any one of the output signals to a global clock network, the global clock network providing clock signals to all clockable circuits on an integrated circuit chip; or selectably coupling any one of the output signals to at least one local clock network, the local clock network providing clock signals to only a portion of clockable circuits on the integrated circuit chip*” does not further limit the limitation of the claim. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex Parte Masham*, 2 USPQ F.2d 1647 (1987). Therefore, this limitation has not been given patentable weight.

With respect to claims 12, 13 and 28, Ebuchi et al. discloses, in Fig.10, a circuit and its corresponding method of providing multiple clock signals [PH1,..., PH10] based on a reference signal [REFCLK], the method comprising generating a first plurality of clock signals [PHA1, ..., PHA10] in response to receiving reference signal; each of the plurality of clock signals having the same frequency and a different phase; generating concurrently a second plurality of clock signals [t1b, ..., t10b] each having a phase and a selectable frequency; and making each of the second plurality of clock signals available for a same plurality of clocking applications; wherein the clocking applications include off-chip clocking, on-chip global clocking, on-chip local clocking, frequency synthesizing, and zero delay buffering.

The recitation of “*making each of the second plurality of clock signals available for a same plurality of clocking applications; wherein the clocking applications include off-chip clocking, on-chip global clocking, on-chip local clocking, frequency synthesizing, and zero delay buffering*” does not further limit the limitation of the claim; similarly the recitation “*A digital processing system ... and said input/output circuitry*” (in claim 28) does not further limit the limitation of the claim. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex Parte Masham*, 2 USPQ F.2d 1647 (1987). Therefore, this limitation has not been given patentable weight.

Allowable Subject Matter

3. Claims 1-7, 14-21 and 24-27 are allowed.
4. The following is a statement of reasons for the indication of allowable subject matter:

The closest prior art of record does not show or fairly suggest:

a) A method of concurrently generating a plurality of clock signals including the steps of dividing frequency of each of produced signals concurrently in accordance with programmable selections of frequency divisors to produce output signals each having a frequency and phase; and multiplexing the output signals in accordance with programmable selections, in combination of the remaining limitations, as called for in claim 1; and

b) A circuit on a programmable logic device for outputting a plurality of clock signals including first multiplexing circuitry coupled to receive plurality of VCO output signals each having a different phase and operative to output a signals selected plurality of phase-selected

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from said plurality of VCO output signals; a plurality of frequency dividers each coupled to the multiplexing circuit and second multiplexing circuitry coupled to receive each of phase-selected and frequency-divided signals from plurality of frequency dividers, in combination with the remaining claimed limitations, as called for in claim 14.

Remarks

5. Applicants' arguments filed 08/05/2005 have been seriously considered. Claims 1-7 and 14-21 and 24-27 have been allowed due to the amendment; and claims 11-13 and 28-30 are rejected based on new prior art to Ebuchi et al., as set forth in the office action.

Note that all prior art references indicated on the Applicant filed International Search Report of WO 02/097990 have been considered.

Inquiry

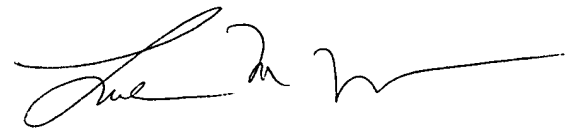
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh M. Nguyen whose telephone number is (571) 272-1749. The examiner can normally be reached on Alternate Mon, Tuesday - Friday from 7:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LMN



LINH MY NGUYEN
PRIMARY EXAMINER